**That Which Is Claimed Is:**

**1.** An audio communications control system useful in training operations on tactical systems communications equipment onboard a ship, the audio communications control system comprising:

ship communications equipment operable from a plurality of remote locations onboard a ship for communication with a centralized control center, the ship communications equipment including a plurality of audio communications systems, wherein at least one of the plurality of audio communications systems includes audio equipment and signal processing unlike that of the balance of the plurality of audio communications systems.

a tactical training system operable with the central control center for interfacing with tactical equipment distributed through the plurality of remote locations, the tactical training system providing a communications connection to a wide area network (WAN) for communicating with other ships participating in a training exercise;

a headset having a left speaker, a right speaker, and a microphone for providing an operator with voice transmission;

an audio interface operable between the tactical training system and the headset, the audio interface providing an electrical connection to the ship communications equipment for operation therewith, the audio interface switching discrete audio communications connections from any ship communications equipment and routing audio signals representative of the discrete connections to each of the left speaker, the right speaker, and the microphone of the headset; and

an operator control interface operable with the audio interface for controlling the routing and switching of the audio signals, the operator control interface including an interactive graphical display for selection of the communications equipment to be operable with the headset.

**2.** The audio communications control system according to Claim 1, wherein

the ship communications equipment comprises communications equipment selected from the group consisting of a tactical radio telephone system, an interphone system, a sound power telephone system, and a surface ship telephone system.

**3.** The audio communications control system according to Claim 1, wherein the tactical training system comprises a battle force tactical trainer.

**4.** The audio communications control system according to Claim 1, wherein the audio interface comprises a central processing unit operable with the operator control interface for processing control functions thereof, and wherein the central processing unit receives input from a computer mouse for selection of the routing and switching.

**5.** The audio communications control system according to Claim 1, further comprising:

a personal computer operable with the audio interface;

a monitor operable with the personal computer for displaying the graphical display; and

an input device for operation with the operator control interface.

**6.** The audio communications control system according to Claim 5, wherein the input device comprises a computer mouse operable with the monitor for selecting the communications system and routing of audio signals to the headset.

**7.** The audio communications control system according to Claim 1, wherein the audio interface includes a network control module for sending and receiving network packets of information across the WAN.

**8.** The audio communications control system according to Claim 1, wherein the audio interface includes a digital signal processor for converting analog audio signal

received from the communications equipment into a digital signal for processing thereof.

**9.** The audio communications control system according to Claim 8, further comprising a time encoder operable with a global positioning system for time stamping of audio packets transmitted and received via the WAN.

**10.** The audio communications control system according to Claim 1, wherein the graphical display of the operator control interface comprises left and right channel graphical user interface buttons for selection of a desired audio connection to the communications equipment.

**11.** The audio communications control system according to Claim 1, wherein the graphical display of the operator control interface comprises scenario control buttons for selection of a desired virtual frequency channel of the WAN for input to one of the left speaker and the right speaker, as desired.

**12.** The audio communications control system according to Claim 1, wherein the graphical display of the operator control interface comprises an interphone button for accessing equipment within an interphone communications system through selection on a speed dial menu.

**13.** The audio communications control system according to Claim 1, wherein the graphical display comprises a graphical user interface display that is reconfigurable to a desired communications system display.

**14.** An audio communications control system comprising:

a single headset having a left speaker, a right speaker, and a microphone for providing an operator with voice transmission;

an audio interface for operating between a plurality of audio communications

equipment and the single headset, the audio interface providing an electrical connection to the plurality of voice communications systems for operation therewith, the audio interface switching discrete audio communications signals therefrom and routing the audio signals to one of the left speaker, the right speaker, and the microphone of the headset; and

an operator control interface operable with the audio interface for controlling the routing and switching of the audio signals, the operator control interface including a display for viewing by the operator and manual selection of the discrete audio communications signals to be operable with the single headset.

**15.** The audio communications control system according to Claim 14, wherein the audio signals comprises voice signals.

**16.** The audio communications control system according to Claim 14, further comprising a second headset operable with the audio interface for use by a second operator, the second headset being the single headset for the second operator.

**17.** The audio communications control system according to Claim 14, further comprising audio communications equipment operable from a plurality of remote locations for communication with a centralized control center, the communications equipment including a plurality of audio communications systems, wherein at least one of the plurality of audio communications systems includes audio equipment and signal processing unlike that of the balance of the plurality of audio communications systems.

**18.** The audio communications control system according to Claim 17, wherein the communications equipment includes communications equipment selected from the group consisting of a tactical radio telephone system, an interphone system, a sound power telephone system, and a surface ship telephone system.

**19.** The audio communications system according to Claim 14, wherein the

audio interface comprises a central processing unit operable with the operator control interface for processing control functions thereof, and wherein the central processing unit receives input from a computer mouse for selection of the routing and switching.

**20.** The audio communications system according to Claim 14, further comprising:

a personal computer operable with the audio interface;

a monitor operable with the personal computer for providing the display, wherein the display includes a graphical user display; and

an input device for operation with the operator control interface.

**21.** The audio communications system according to Claim 20, wherein the input device comprises a computer mouse operable with the monitor for selecting the communications system and routing of audio signals to the headset.

**22.** The audio communications system according to Claim 14, wherein the audio interface includes a network control module for sending and receiving network packets of information across a wide area network (WAN).

**23.** The audio communications system according to Claim 22, further comprising a time encoder operable with a global positioning system for time stamping of audio packets transmitted and received via the WAN.

**24.** The audio communications system according to Claim 23, wherein the display of the operator control interface comprises a graphical user display including scenario control buttons for selection of a desired virtual frequency channel of the WAN for input to one of the left speaker and the right speaker, as desired.

**25.** The audio communications system according to Claim 14, wherein the display of the operator control interface comprises a graphical user display including left

and right channel buttons for selection of a desired audio connection to the communications equipment.

**26.** The audio communications system according to Claim 25, wherein the graphical display comprises a graphical user interface display that is reconfigurable to a desired communications system display.

**27.** The audio communications system according to Claim 14, wherein the audio interface includes a digital signal processor for converting analog audio signal received from the communications equipment into a digital signal for processing thereof.

**28.** A method for communicating with a plurality of voice communications systems, the method comprising the steps of:

providing a single headset having a left speaker, a right speaker, and a microphone for providing an operator with voice transmission;

electrically connecting an audio interface between a plurality of audio communications systems and the single headset, the audio interface switching discrete audio communications signals from the plurality of audio communications systems and routing the discrete audio signals to one of the left speaker, the right speaker, and the microphone of the headset in response to a command from an operator;

providing a graphical user interface operable with the audio interface for controlling the routing and switching of the audio signals, the operator control interface including a push button styled display for viewing by the operator and manual selection of discrete audio communications signals for operating with the headset; and

operating the graphical user interface for connection to a first discrete audio communications system and routing a first discrete audio signal to one of the left speaker and the right speaker of the single headset;

operating the graphical user interface for connection to a second discrete audio communications system and routing a second discrete audio signal to another of the

left speaker and the right speaker of the single headset; and

operating the graphical user interface for connection of the microphone of the headset to a third discrete audio communications system.

**29.** The communicating method according to Claim 28, wherein the audio signals comprises voice signals.

**30.** The communicating method according to Claim 28, further comprising the step of providing a second single headset operable with the audio interface by a second operator.

**31.** The communicating method according to Claim 28, wherein at least one of the plurality of audio communications systems includes audio equipment and signal processing unlike that of the balance of the plurality of audio communications systems.

**32.** The communicating method according to Claim 28, further comprising the steps;

connecting a personal computer to the audio interface;

providing a monitor operable with the personal computer for displaying the graphical user interface thereon; and

connecting a computer input device to the personal computer for actuating the graphical user interface.

**33.** The communicating method according to Claim 32, wherein the input device connecting step comprises the step of connecting a computer mouse operable with the monitor.

**34.** The communications method according to Claim 28, further comprising the step of selecting control buttons of the graphical user interface for communication between the headset and a wide area network (WAN), wherein the audio interface

includes a network control module for sending and receiving network packets of information across the WAN.

**35.** The communications method according to Claim 34, further comprising the step of time encoding a recording of voice communications using a global positioning system for time stamping of audio packets transmitted and received via the WAN.

**36.** The audio communications system according to Claim 35, wherein the display of the operator control interface comprises a graphical user display including scenario control buttons for selection of a desired virtual frequency channel of the WAN for input to one of the left speaker and the right speaker, as desired.

**37.** The communicating method according to Claim 28, further comprising the step of configuring the graphical user interface for displaying control and switching buttons operable with a preselected set of communications systems.

**38.** The communicating method according to Claim 37, wherein the configuring step comprises the step of displaying left and right channel buttons.